

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 7182 - L2 Version 5
Chandra X-Ray Center

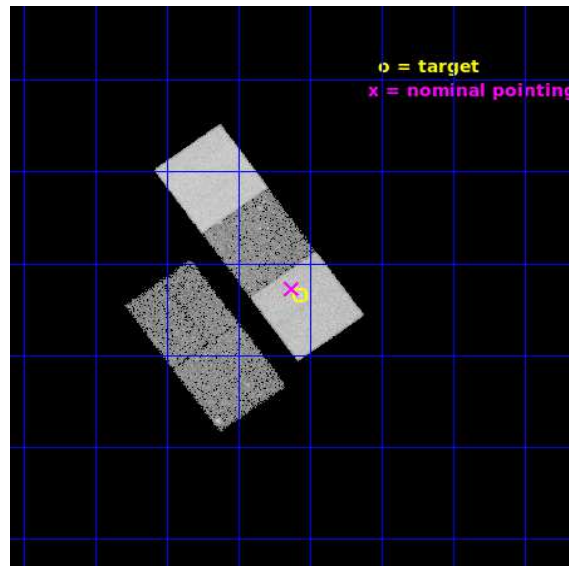
L2 Processing Date : Oct 10 2020

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

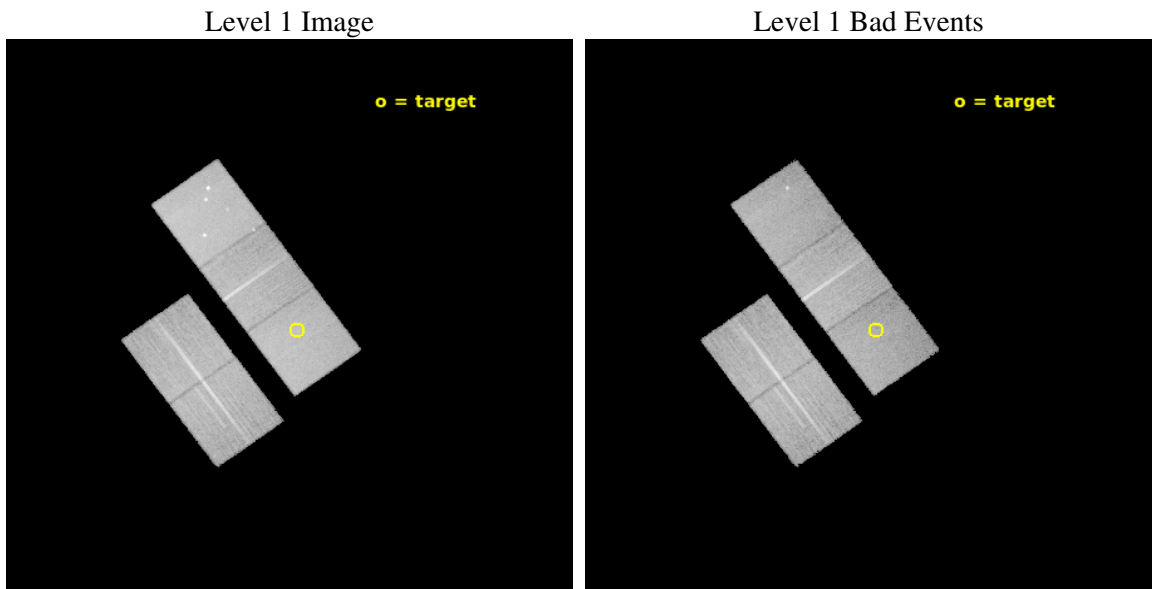
seq_num	800500	Sequence number
obs_id	7182	Observation id
title	A detailed study of a z>1 galaxy cluster	Proposal title
observer	Dr Laurence Jones	Principal investigator
object	2XLSSd J022404.2-041331	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	36.017083	Observer's specified target RA [deg]
dec_targ	-4.224694	Observer's specified target Dec [deg]
ra_nom	36.031903625448	Nominal RA [deg]
dec_nom	-4.2123143977457	Nominal Dec [deg]
roll_nom	54.162297552107	Nominal Roll [deg]
revision	5	Processing version of data
ontime	23175.59995541	Sum of GTIs [s]
livetime	22872.793680364	Livetime [s]
ontime2	23169.317965031	Sum of GTIs [s]
ontime3	23175.59995541	Sum of GTIs [s]
ontime5	23175.59995541	Sum of GTIs [s]
ontime6	23172.45898515	Sum of GTIs [s]
ontime7	23175.59995541	Sum of GTIs [s]
l2events	194871	Number of level 2 events



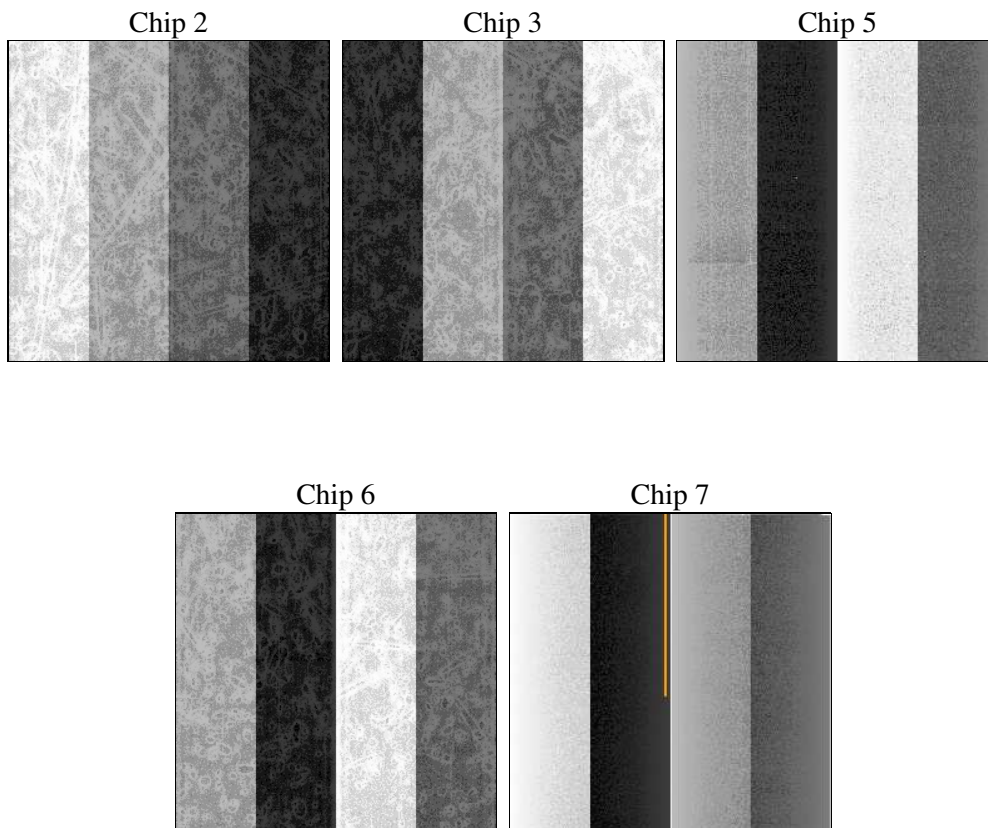
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	23175.59995541	Sum of GTIs [s]
caldbver	4.9.2	 	ontime2	23169.317965031	Sum of GTIs [s]
date	2020-10-11T02:08:41	Date and time of file creation	ontime3	23175.59995541	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	23175.59995541	Sum of GTIs [s]
			ontime6	23172.45898515	Sum of GTIs [s]
			ontime7	23175.59995541	Sum of GTIs [s]
			l1events	819024	Number of level 1 events

2.1.4 Events

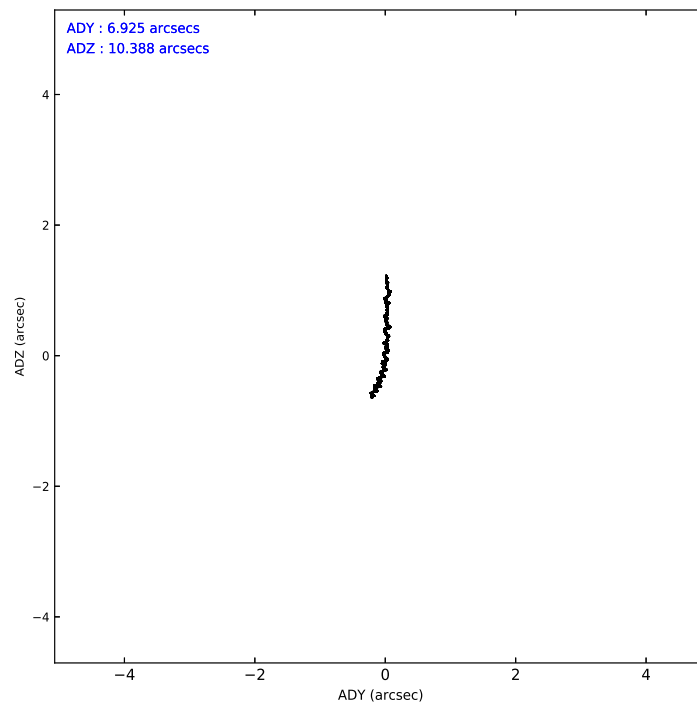
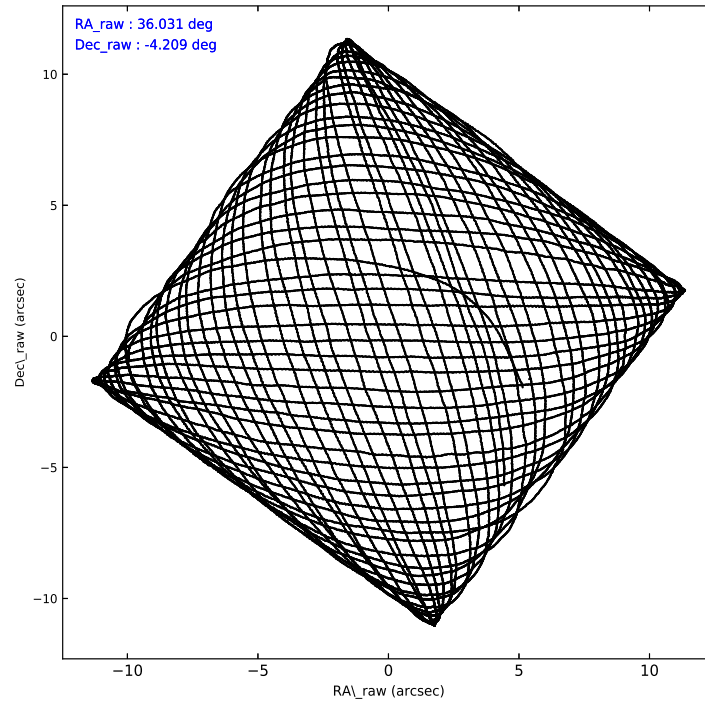
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	151293	146296	205717	148932	166786
rejected events	137457	132909	108861	133975	94522
rejected %	90%	90%	52%	89%	56%

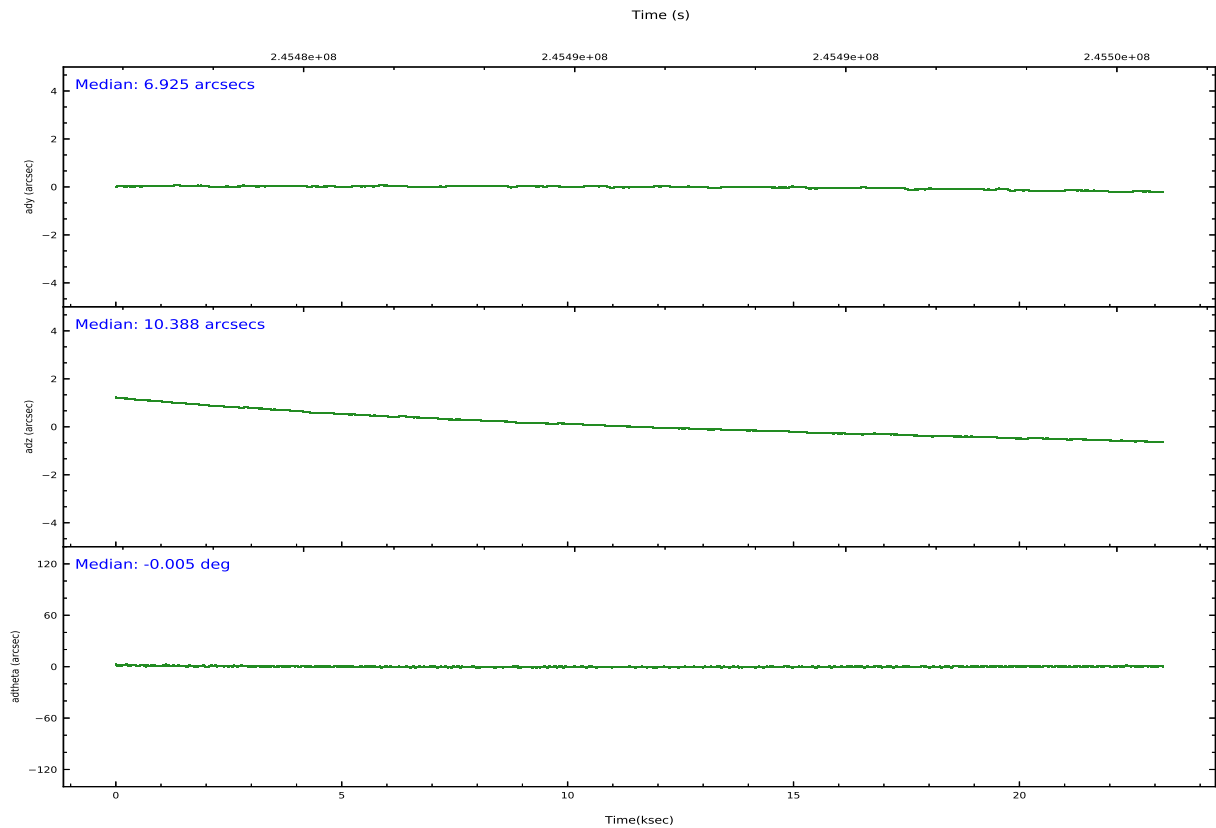
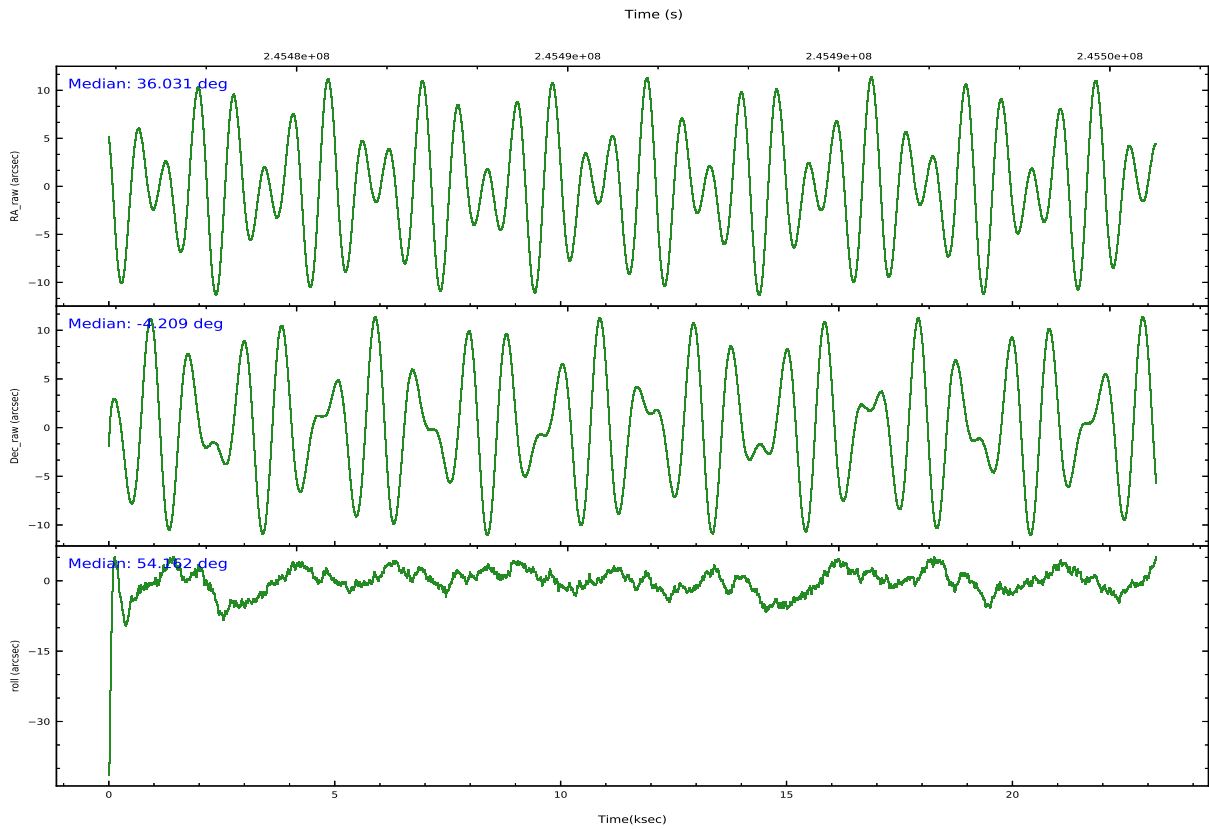
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	5146	4896	9435	5355	6435
	3%	3%	4%	3%	3%
grade 1 events	70	74	201	57	158
	0%	0%	0%	0%	0%
grade 2 events	3399	2975	30162	3350	15114
	2%	2%	14%	2%	9%
grade 3 events	1633	1677	4261	1673	7079
	1%	1%	2%	1%	4%
grade 4 events	1604	1649	4166	1774	6878
	1%	1%	2%	1%	4%
grade 5 events	4766	5881	16834	6142	17468
	3%	4%	8%	4%	10%
grade 6 events	2571	2715	52683	3341	39426
	1%	1%	25%	2%	23%
grade 7 events	132104	126429	87975	127240	74228
	87%	86%	42%	85%	44%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	36.028223	36.031903625448	Subarray requested	NONE	NONE
[deg] Pointing Dec	-4.236056	-4.2123143977457	Alternating exposures requested	N	N
[deg] Pointing Roll	54.000825	54.162297552107	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	245478024.184000	245476588.29338			
Observation start date	2005-10-12T04:19:20	2005-10-12T03:56:28			
[s] Observation end time (MET)	245501024.184000	245502221.49456			
Observation end date	2005-10-12T10:42:40	2005-10-12T11:03:41			
Read mode	TIMED	TIMED			

2.3 Aspect





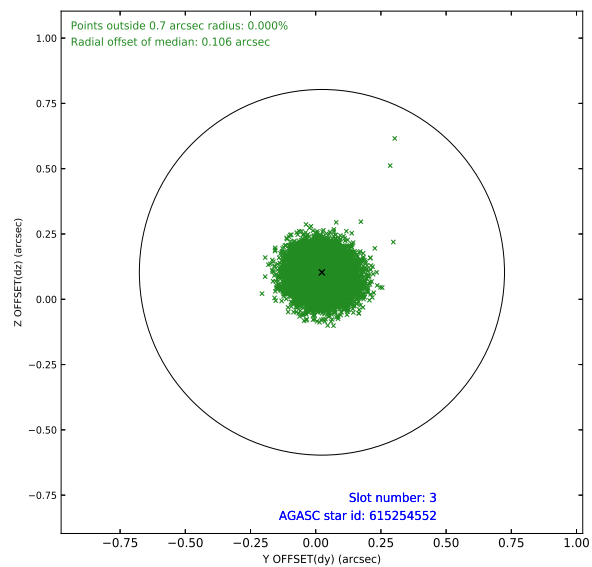
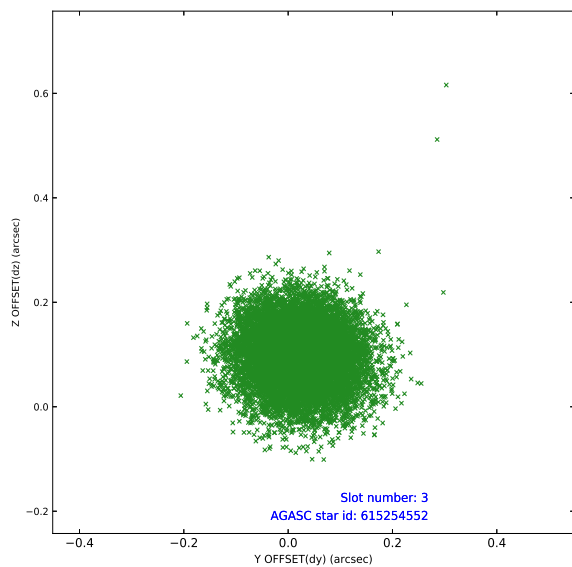
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.11	5654	1.000	-0.120	-0.101	0.007	0.015	0.000000	0.000000	-759.72	-1731
1	FID		ACIS-S-4	7.21	5653	1.000	0.109	0.056	0.010	0.016	0.000000	0.000000	2153.67	176
2	FID		ACIS-S-6	7.35	5654	1.000	-0.016	0.052	0.011	0.018	0.000000	0.000000	402.48	814
3	GUIDE	used	615254552	9.22	11300	1.000	0.024	0.103	0.090	0.144	36.600600	-3.877551	2252.01	-904
4	GUIDE	used	615256360	7.78	11307	1.000	-0.128	-0.196	0.070	0.115	36.286608	-3.875886	1594.69	10
5	GUIDE	used	615256944	9.80	11276	1.000	0.191	0.001	0.133	0.226	35.497386	-4.510719	-1919.87	959
6	GUIDE	used	615260160	9.71	11299	1.000	0.010	0.073	0.149	0.237	35.737387	-3.921265	302.24	1510
7	GUIDE	used	615260392	7.63	11308	1.000	-0.103	0.017	0.058	0.096	35.914136	-3.376682	2261.95	2150

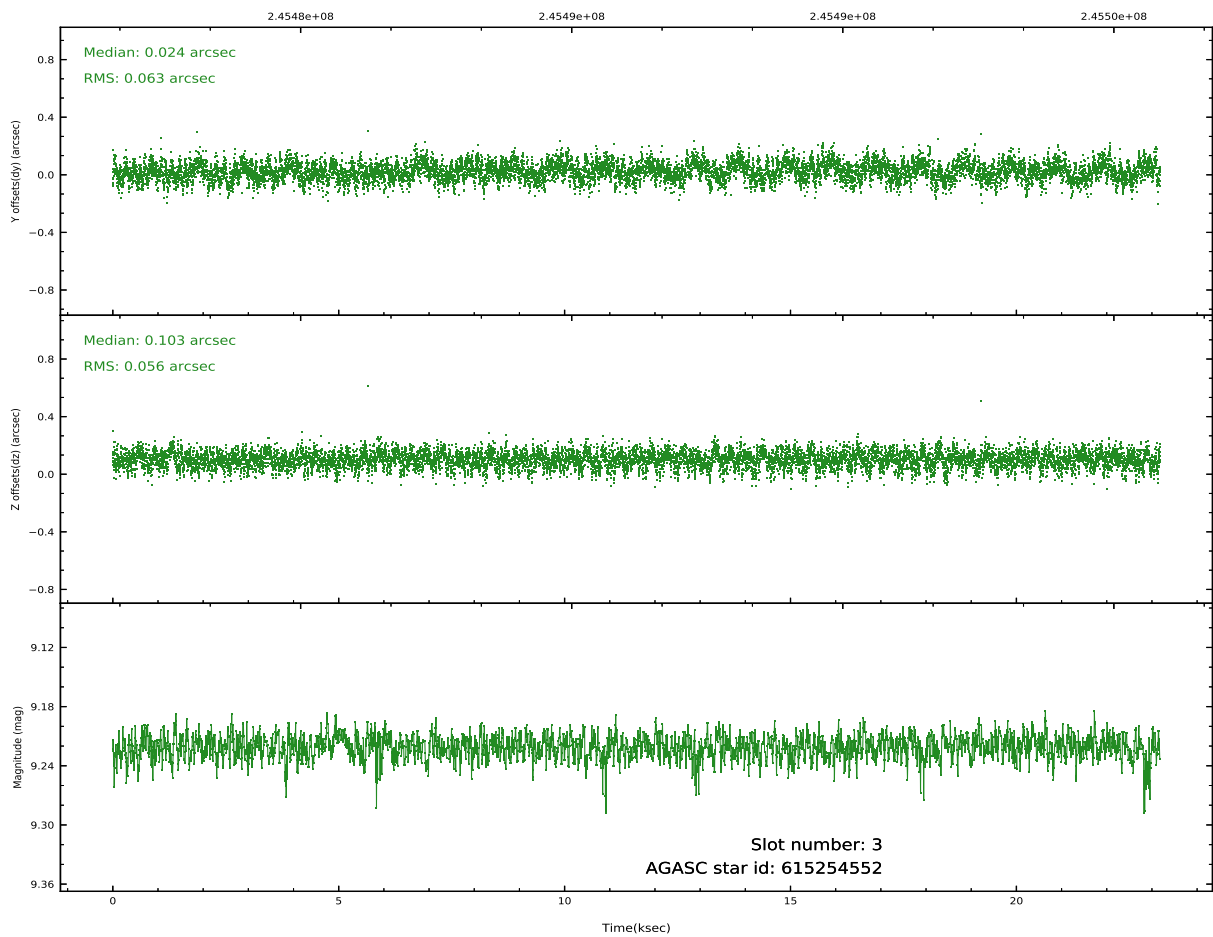
∞

2.4 Star Slots

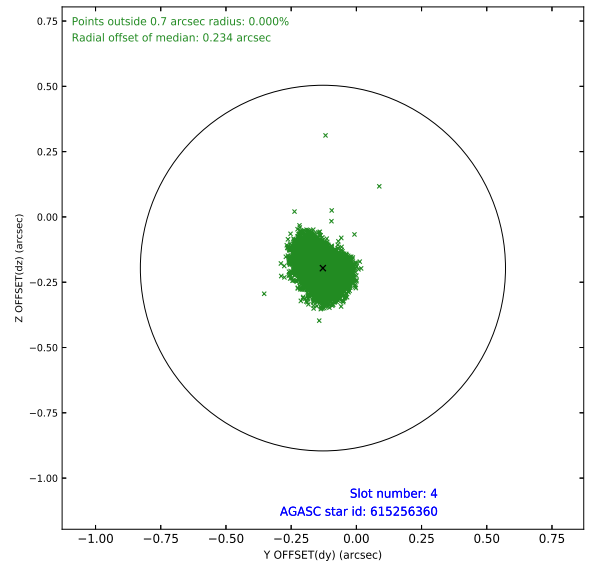
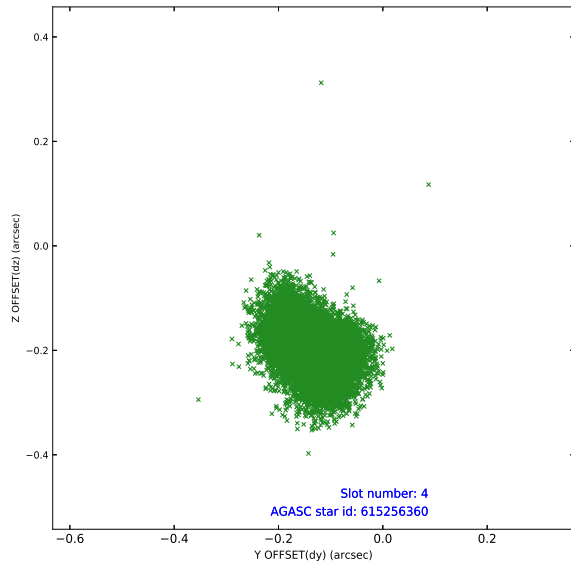
2.4.1 Slot 3



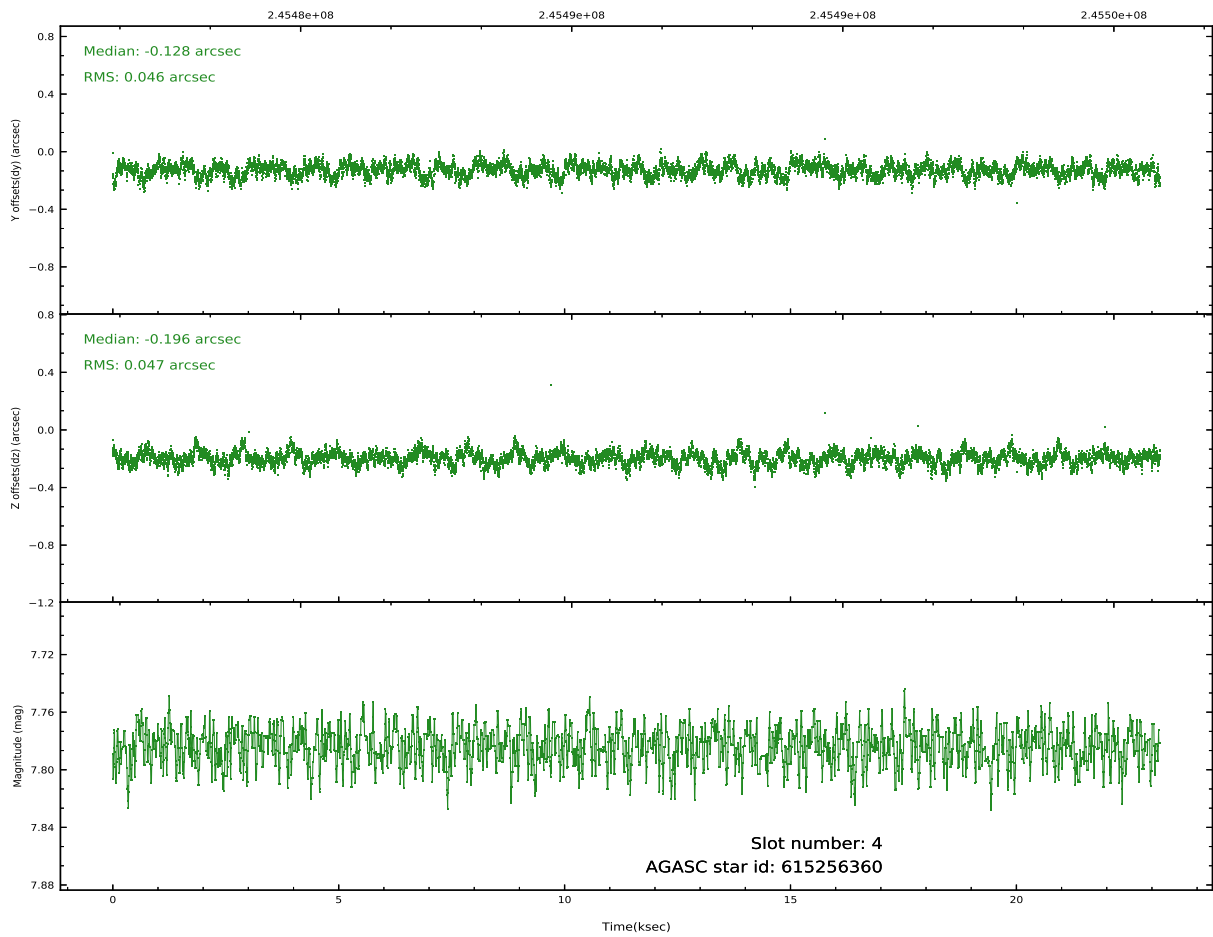
Time (s)



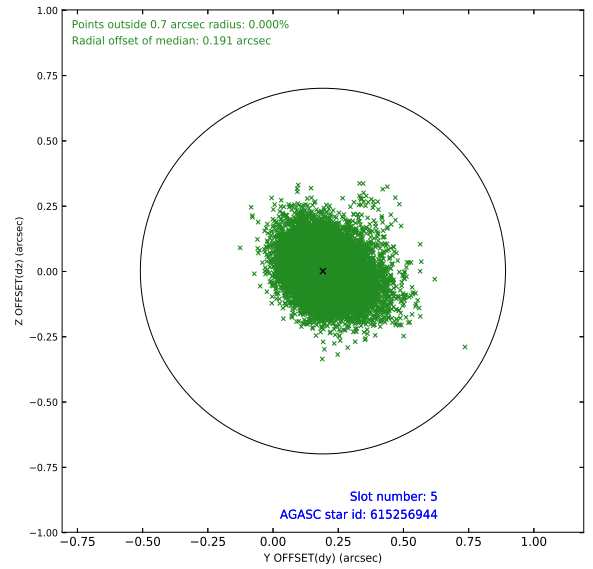
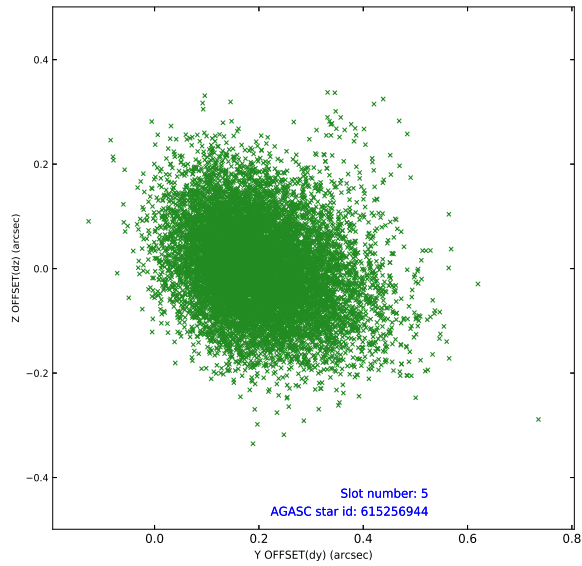
2.4.2 Slot 4



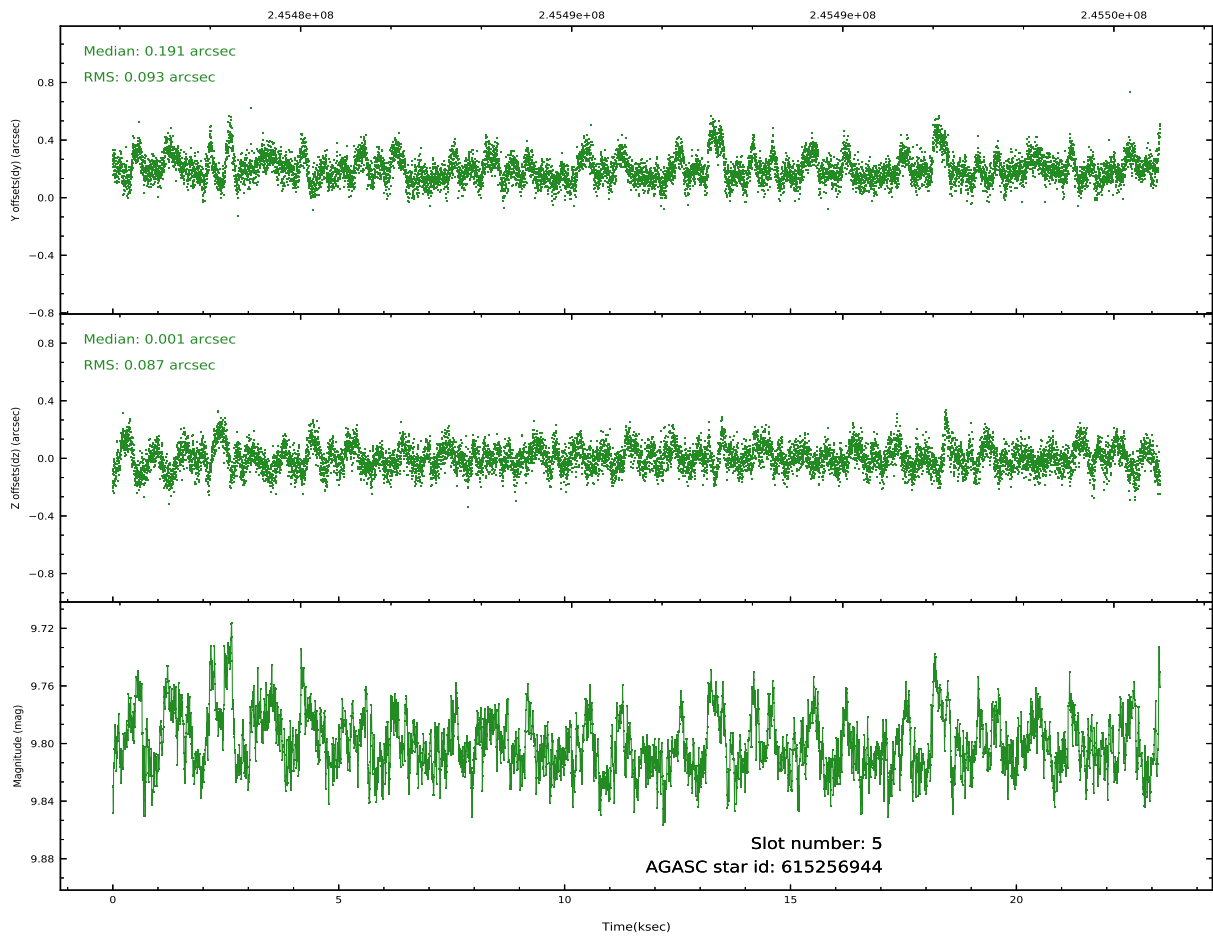
Time (s)



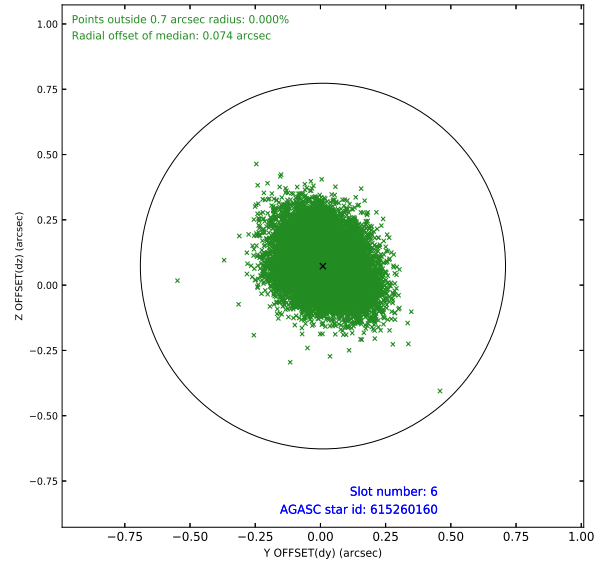
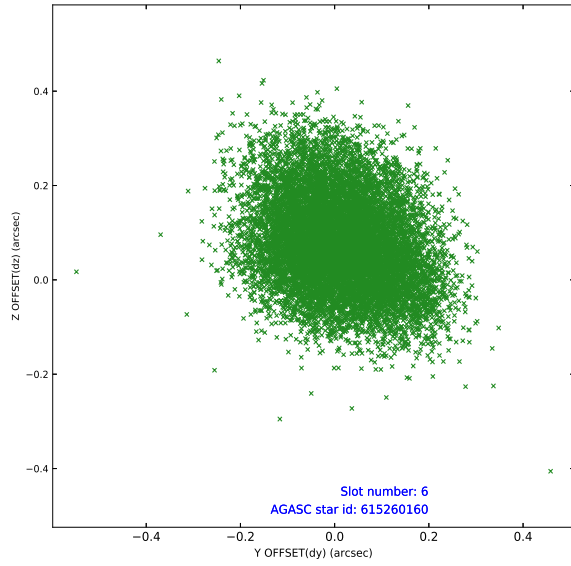
2.4.3 Slot 5



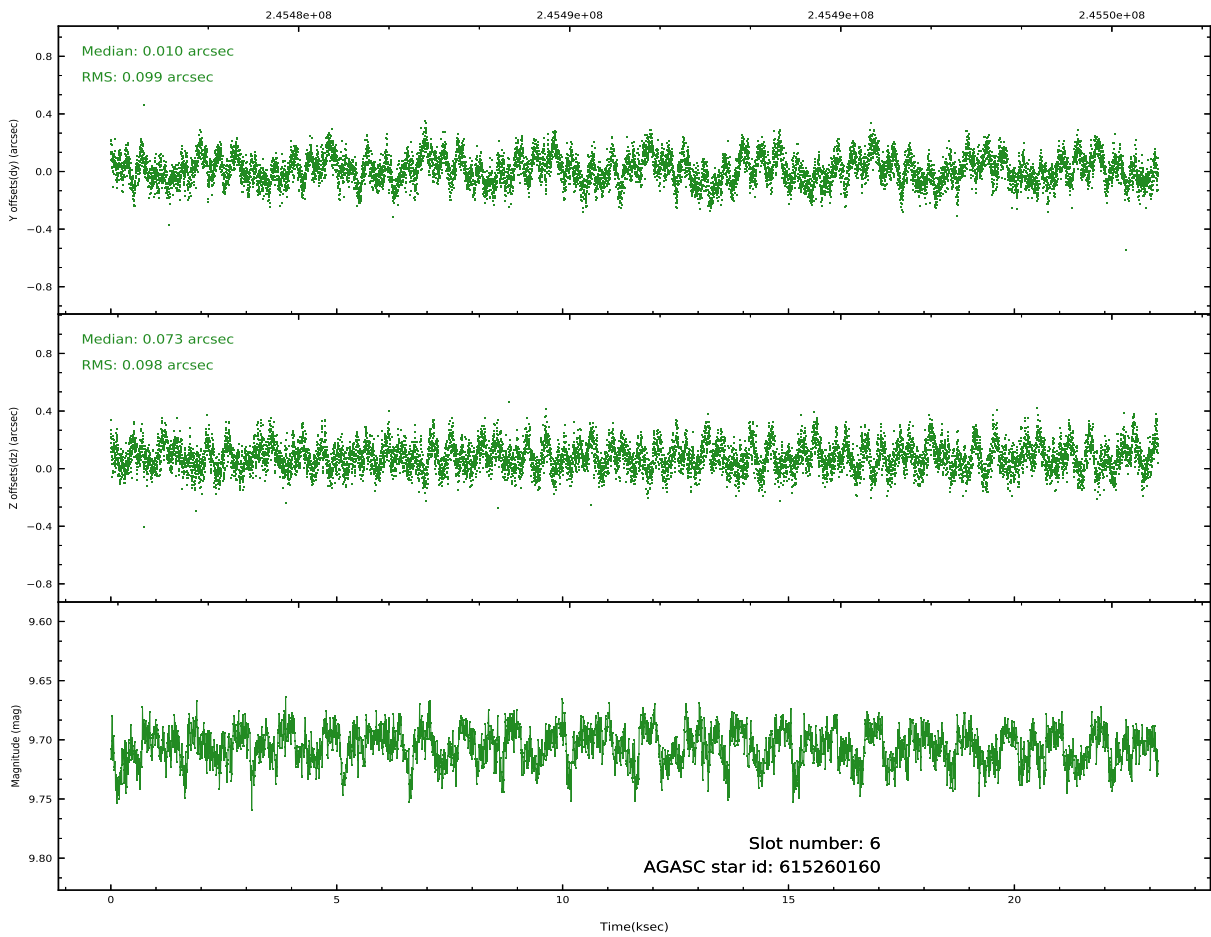
Time (s)



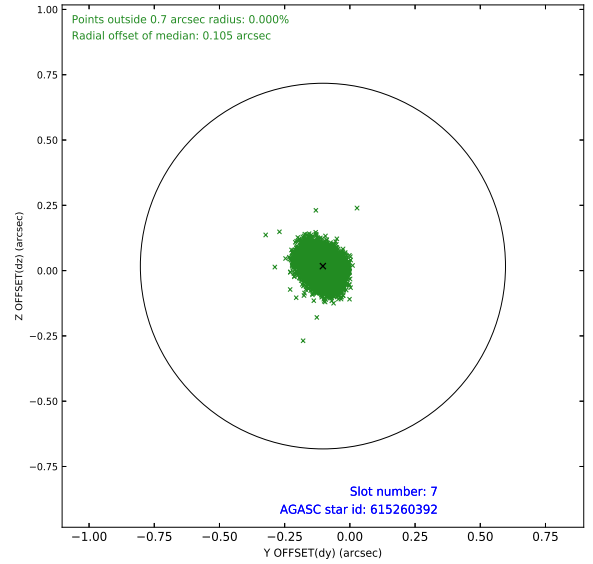
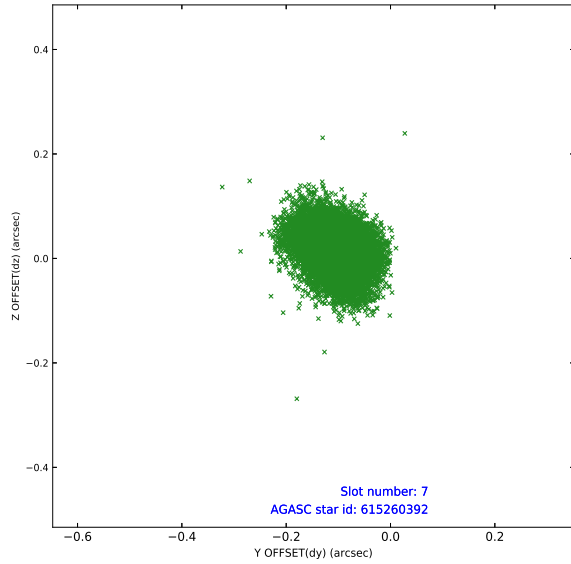
2.4.4 Slot 6



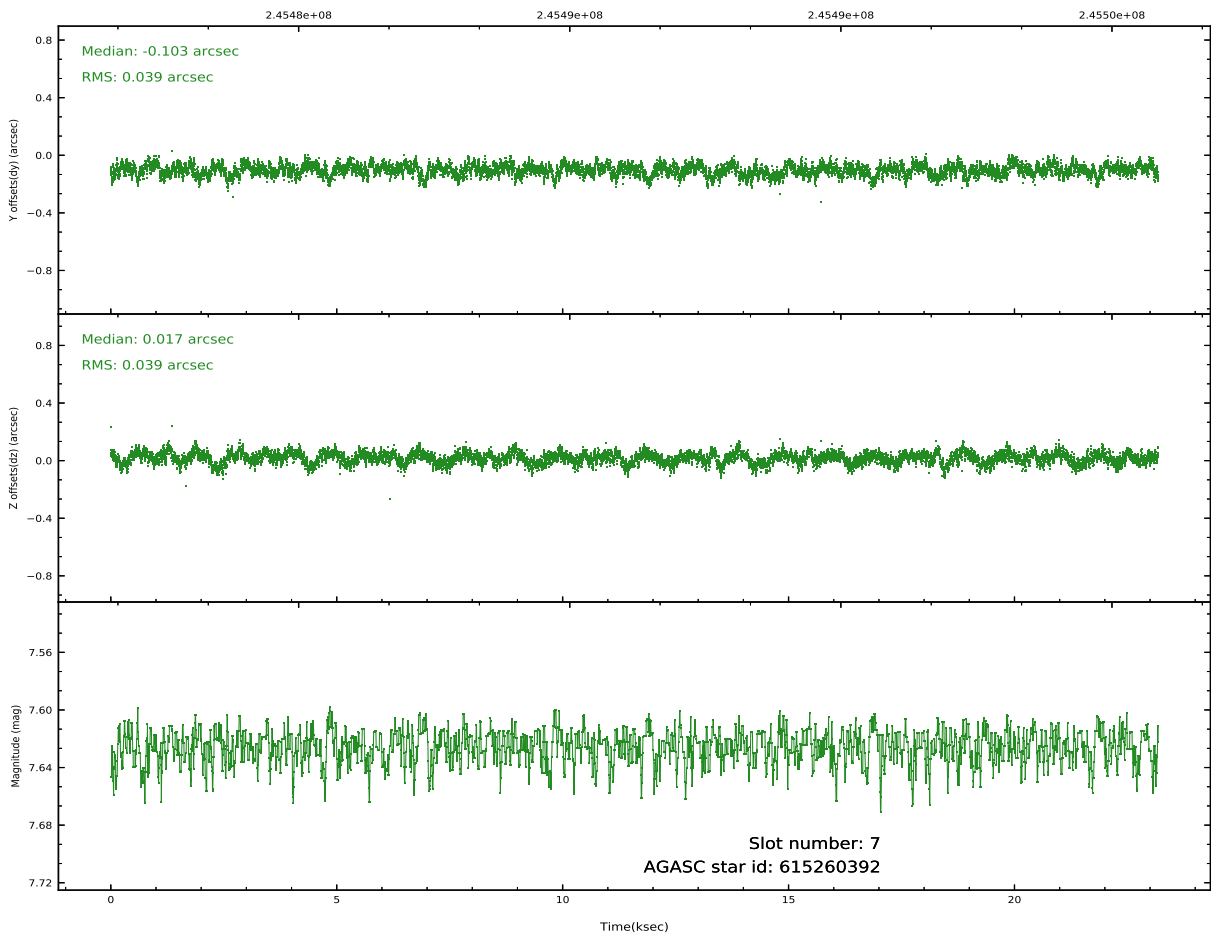
Time (s)



2.4.5 Slot 7

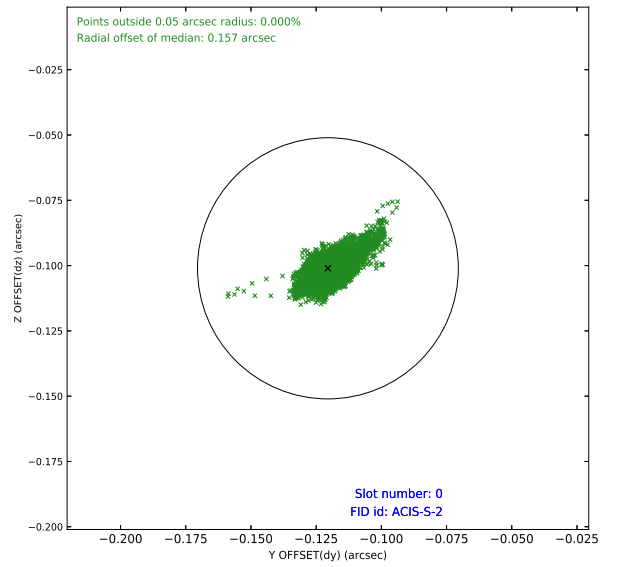
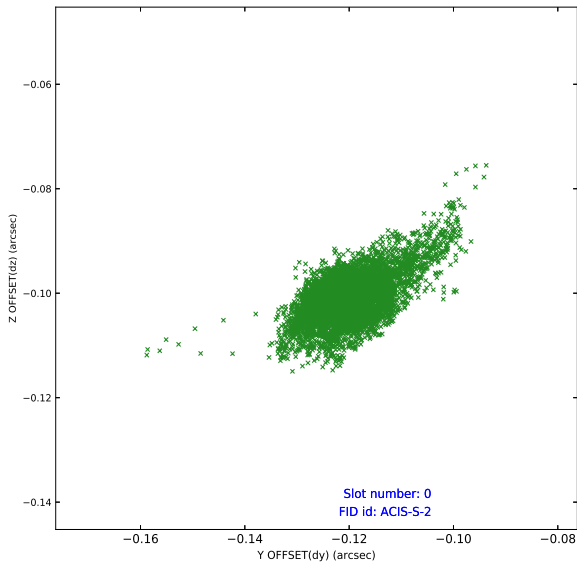


Time (s)

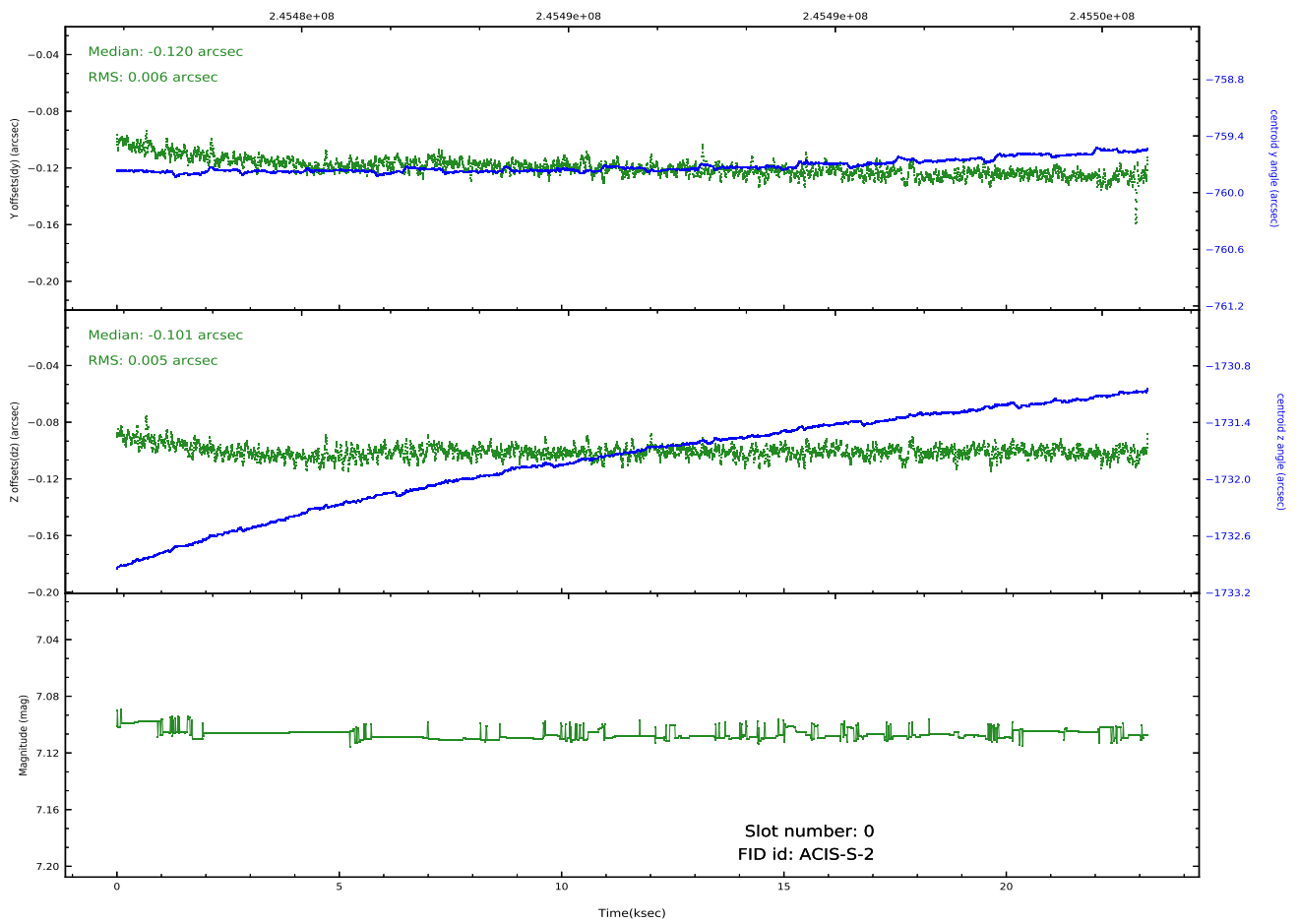


2.5 FID Slots

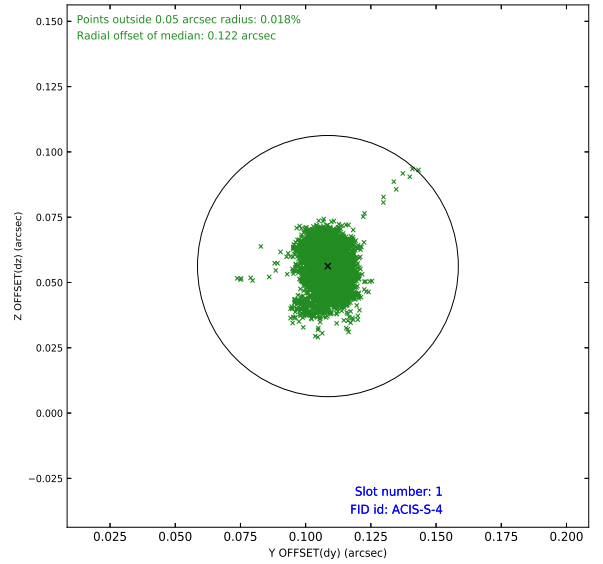
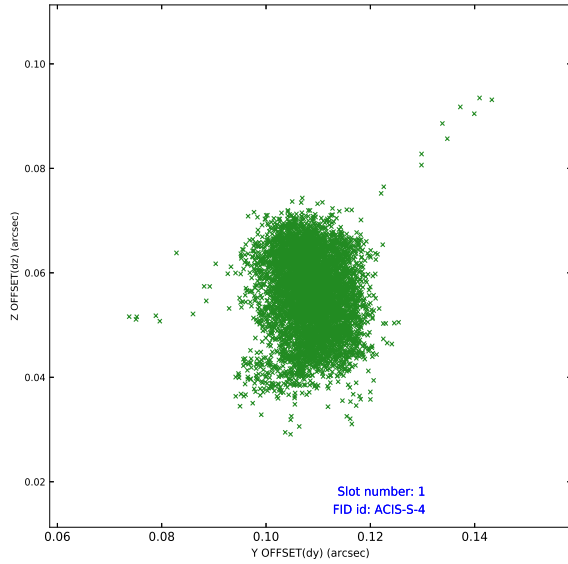
2.5.1 Slot 0



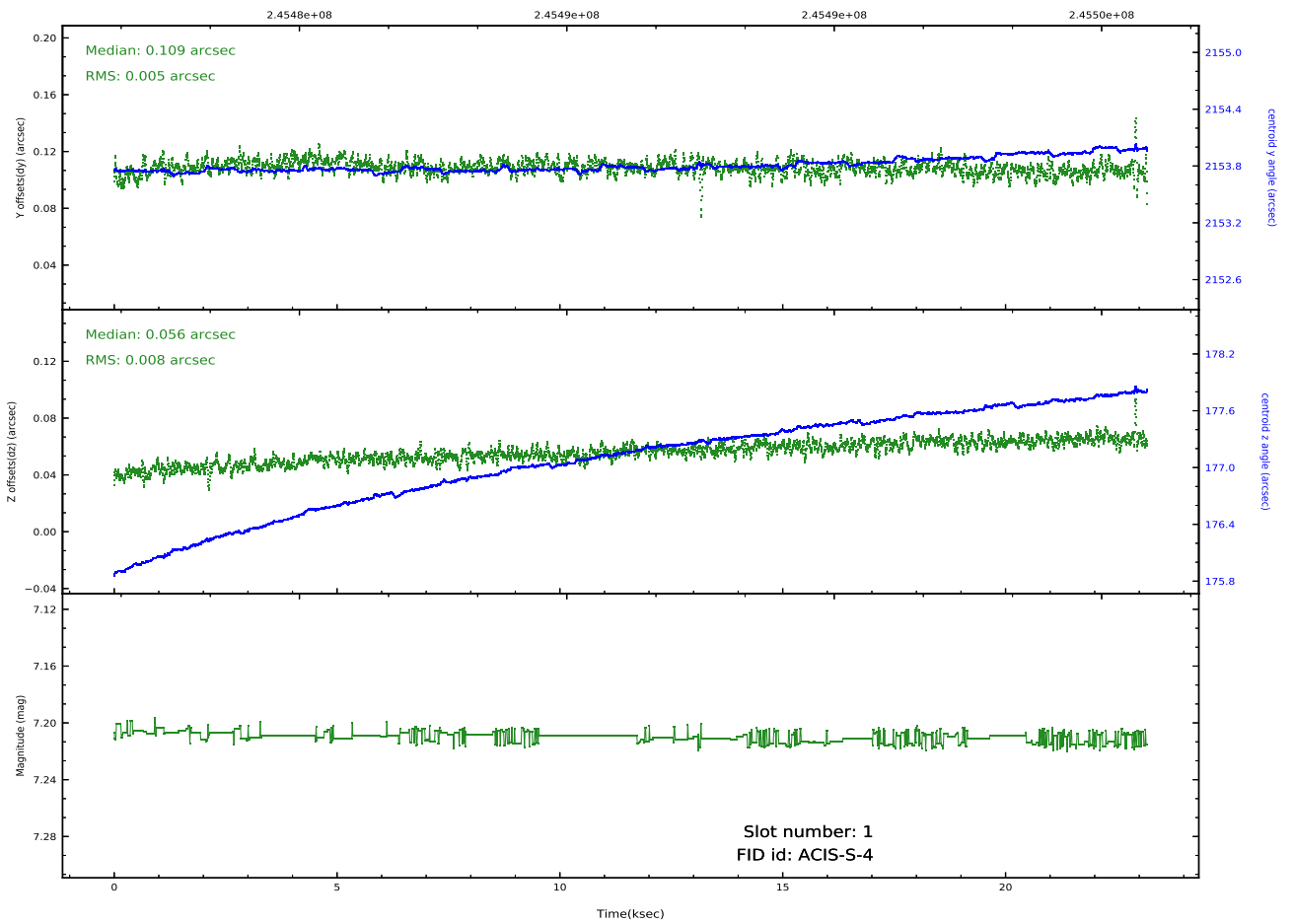
Time (s)



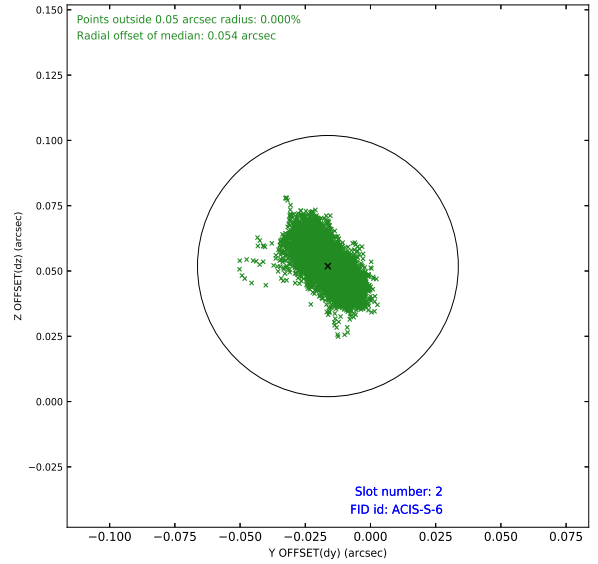
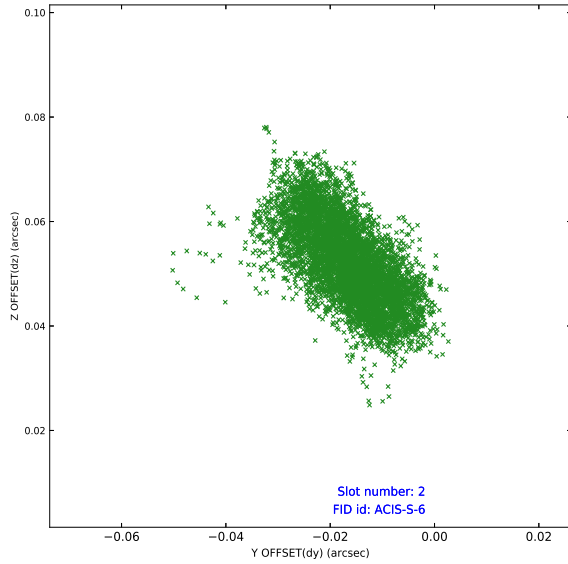
2.5.2 Slot 1



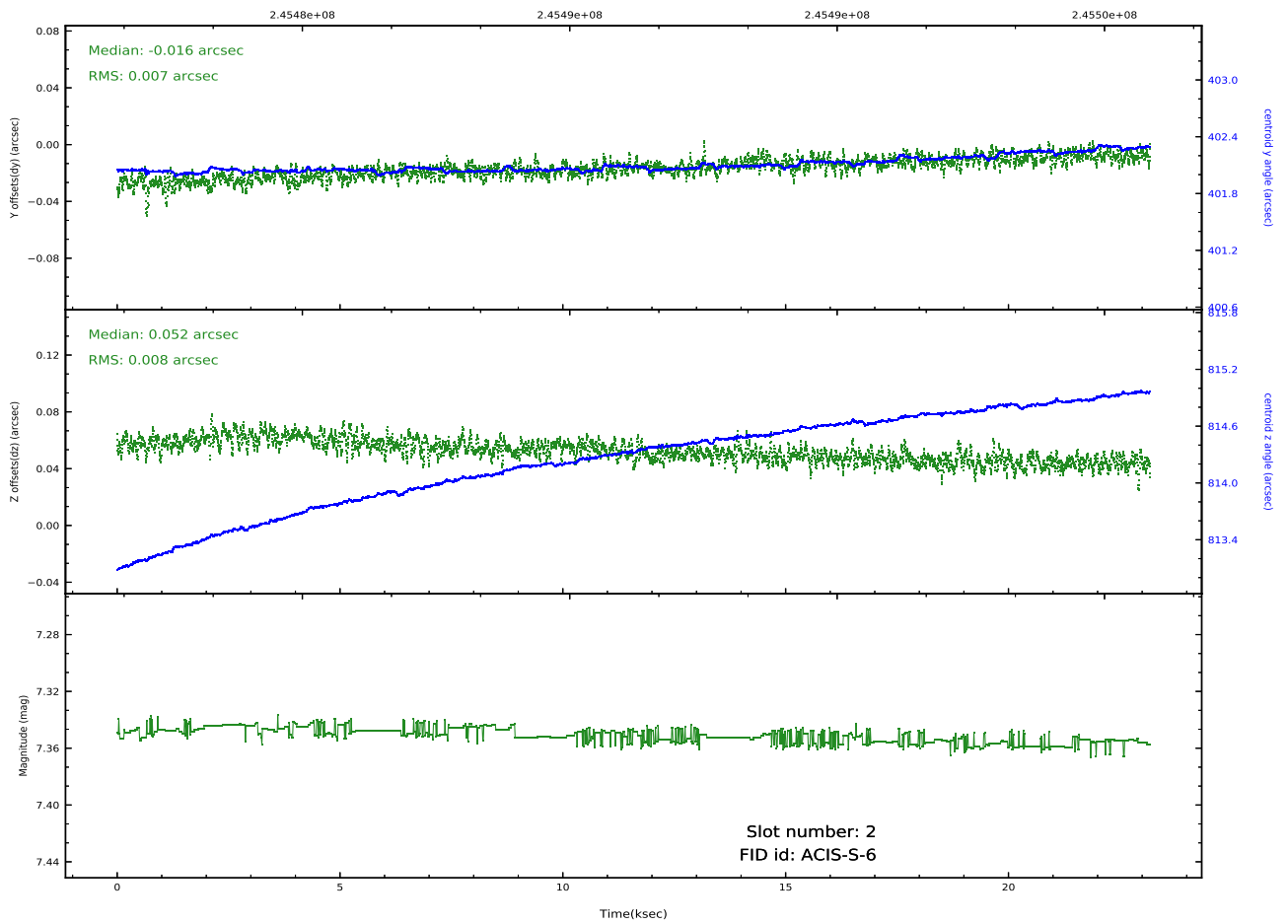
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.17559

A.2 Comments

Joint proposal with XMM.

===

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. The value for FP temperature reported in the headers of the Level 2 event file and the Mission Timeline files ARE INCORRECT by this amount for this processing. However, the temperature is corrected in the processing in order to obtain the correct temperature for the CTI correction. So the calibrated data are correct.